



Brad Owen
Lieutenant Governor



March 13, 2006

Mary Selecky, Secretary of Health
Washington State Department of Health
P.O. Box 47890
Olympia, WA 98504-7890

RE: Aerobic Bacterial Generator (ABG) permitting issues .

Dear Secretary Selecky,

I am writing to seek your assistance in establishing a permitting standard to deal with new technologies that are emerging in the area of septic system treatment and drain field recovery.

You may already be aware of ABG systems (information enclosed) that denitrify septic water and recover failed drain fields. Unfortunately, this proven technology, and the plumbing apparatus that goes with it, has no existing, state standards to provide regulators with the ability to approve, or deny, its installation.

I respectfully request that the Washington State Department of Health assist in the creation of a mechanism for reviewing and approving the use of these new technologies, and/or push for the adoption of existing, national standards in instances where the Washington Administrative Code is silent.

Thank you for your attention and consideration.

Sincerely,

Brad Owen
Lieutenant Governor
State of Washington

Enclosures

RECEIVED

MAR 16 2006

OFFICE OF THE SECRETARY

President of the Senate
Chairman, Rules Committee

220 Legislative Building
PO Box 40400
Olympia, WA 98504-0400

Phone: (360) 786-7700
FAX: (360) 786-7749
e-mail: owen_br@leg.wa.gov





PIRANA

nature called. we answered.

CASE STUDY

#101-A

PREPARED BY KEN MORSE, NET SEPTIC

STUDY STARTING DATE: OCTOBER, 2004

NET Septic - Authorized Pirana Distributor Northwest

PO Box 1771 Olympia, WA 98507 phone **360-923-1080**

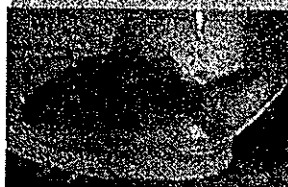
www.NetSeptic.com

www.PiranaABG.com

Union, Washington

Pirana—ABG Technology in Action...

- Recovered the Drain-Field
- Eliminated Costly Pumping
- De-Nitrification in Tank & Drain-Field



Bill Russell's story is typical of Hood Canal residents with 20 to 30 year old gravity drain-fields. Wastewater was backing up into Bill's Distribution Box and the drain-field area became "swampy" each winter for the past 5-years.

On October 7, 2004 Bill became the first residential homeowner in Washington State to install a Pirana Aerobic Bacterial Generator (ABG) in a septic tank.

The Pirana-ABG eliminated septic odors in just a few days. All throughout the winter the drain-field remained normal—Pirana had saved this dying drain-field from yet another costly repair typical to

our region. Bill can now keep his gravity system.

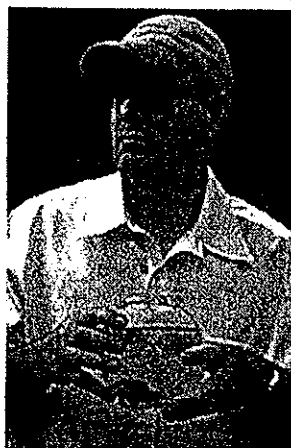
We tested Bill's system for Ammonia, Nitrite, & Nitrate and found the total reduced to about 4-PPM - measured inside the septic tank itself! This is down from the 34-PPM Ammonia at installation.

Pirana-ABG also holds the patent on Drain-Field De-Nitrification. What little Nitrogen escapes the tank is eliminated by the drain-field!

Bill was skeptical until he saw the results in his own drain-field. He is now an Authorized Pirana Dealer in Mason County.



Bill Russell installing his Pirana. He owns Highland Excavation in Union, WA (360) 898-3773



Fish living in Septic Tank? Yes, with Pirana-ABG!

Environmentally this is big news. Inside a normal septic tank these fish would have died in just a few minutes. Our "fish-test" speaks for itself.

There were two things that gave me the idea of growing fish inside a septic tank. The first is Dr. Dan Wickham, PhD (the inventor)

who showed me minnows living in a sludge retention pond where Pirana had cleaned things up.

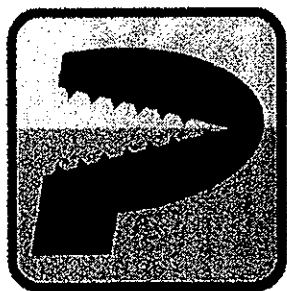
Secondarily, Bill's tank had over 5-PPM oxygen, an extraordinarily high amount of oxygen for a septic tank!

I had to install a clear plastic lid, a nylon-net fish-pen

and a battery-powered fish feeder (later found unnecessary).

Our fish not only survived but grew over the two-month test period. If fish can live inside a septic tank, just imagine what Pirana-ABG will do for our environment.

Yours truly, Ken Morse



PIRANA

nature called. we answered.

CASE STUDY

#102-A

PREPARED BY KEN MORSE, NET SEPTIC

STUDY STARTING DATE: MARCH, 2005

NET Septic - Authorized Pirana Distributor Northwest
PO Box 1771 Olympia, WA 98507 **phone 360-923-1080**
www.NetSeptic.com www.PiranaABG.com

Union, WA (on the Hood Canal)

Pirana—ABG Technology in Action...

- Guards against Bio-mat Failure
- Eliminates costly pumping
- De-Nitrification as low as 0.6 PPM of the combined: $NH_3 + NO_2 + NO_3$

Ron Russell's home is located near the mouth of the Skokomish River on Hood Canal. Typical to Hood Canal, Ron's house has highway on one side and oyster beds on the other. Only difficult, costly repair options are available, should his drain-field fail.

Ron's septic system was not in a state of failure when we installed his Pirana Aerobic Bacteria Generator (ABG). He just wanted to guard against the bio-mat buildup that causes 95% of septic failures (from US-EPA estimates). Pirana actively digests through that bio-mat!

Using an advanced proprietary startup procedure, we have obtained our best de-

nitrification results to date.

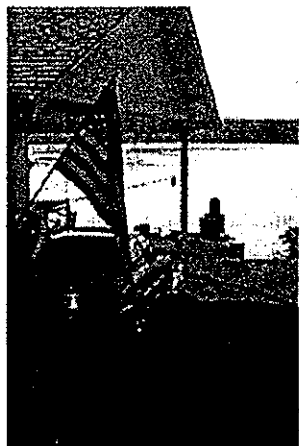
The combined ammonia, nitrite & nitrate total went as low as 0.6 and was commonly less than 1-PPM. This is well below the 57-PPM ammonia in the tank just before we turned the Pirana on.

On some week-ends when Ron has family & friends over, his gallons-per-day water use may be 10 times above average. At those times we see a temporary ammonia increase, but the low levels soon return.

We are continuing to study this unique Pirana- phenomenon & are encouraged by our results.



Ron Russell's Hood Canal home. No room for a repair! Highway on one side & shellfish beds on the other.



Nitrogen the Problem... Pirana-ABG the Solution!

The nitrogen found in septic systems comes from human waste. It shows up as ammonia (NH_3) inside the septic tank.

As ammonia enters the drain-field, the natural soil organisms transform this ammonia into troublesome nitrate (NO_3). The soil does not stop nitrate from reach-

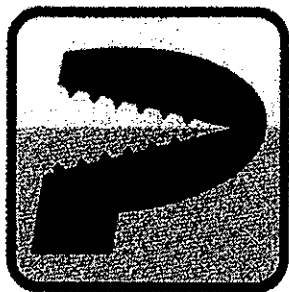
ing marine or fresh water habitats. Harmful environmental effects like algae blooms can deoxygenate the water and kill fish as well as cause other harmful effects.

Remarkably, Pirana's patented de-nitrification does not stop in the septic tank! The de-nitrification process continues to work in the drain-

field also. This is only one fundamental difference compared to other methods of de-nitrification.

Pirana has become our best & most economical tool for solving the nitrogen problem.

Yours truly, Ken Morse



PIRANA

nature called. we answered.

TEXT OF ROY MCNAMEE'S LETTER USED
BY PERMISSION.

CASE STUDY

#104-A

PREPARED BY KEN MORSE, NET SEPTIC

STUDY STARTING DATE: 2002

NET Septic - Authorized Pirana Distributor Northwest
PO Box 1771 Olympia, WA 98507 phone 360-923-1080
www.NetSeptic.com www.PiranaABG.com

Armstrong Redwoods State Reserve Guerneville, CA

September 30, 2003

Gentlemen, I want to express our appreciation of the performance of the PIRANA septic digesting system that was installed at Armstrong Redwoods State Reserve one year ago.

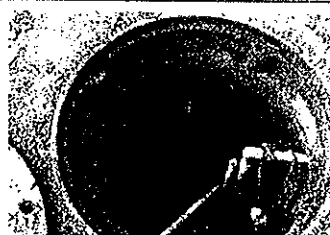
As you recall, under the Visitor Center parking lot we had an older leach field that was unable to handle the high volume of wastewater delivered to it during heavy visitation. On special event, holiday, and especially on high visitation days when we were visited by busloads of school children, we were see-

ing the surfacing of water above the field. We were beginning to have to pump the tank to remove excess solids, and at times, just to provide recovery time for the leach field. Due to the poor and limiting location of the leach field (and the operational conflict and expense of installation of a new field), we decided to test a PIRANA.

A single unit, set in the solid side of the septic tank, has improved performance to where we now have a properly functioning leach field. We have not pumped the tank for a year and, at

present, there is not a buildup of solids that requires pumping and the leach field is taking all liquid delivered to it. Inspections have indicated that solids are being effectively digested and the leach field is again performing adequately for the demand. There has been no attempt to reduce input into the system and no other repair or performance improvement efforts have been made.

Based upon the outcome of this one test site, I believe we may have found a simple and low maintenance approach to deal with older



and failing leach systems at a fraction of the expense of installing a new system. I appreciate that you have continued to monitor the performance of this system yourself and I am hopeful that we can again install a PIRANA when we have a failing leach field.

Roy H McNamee
District Maintenance Chief.

Pirana™ Technology recovers failing leach field at busy Park.



The above text is from a letter written to the Pirana Corporate office by the District Maintenance Chief, California Department of Parks and Recreation for the Russian River District. I could not have written a better description - so I have simply reprinted his comments.

I visited this site in May, 2004 while on a two-day tour of Pirana-ABG installations in Northern California with Dr. Dan Wickham, inventor of the Pirana-ABG (aerobic bacteria generator).

If you look closely at the picture on the left you will see the cut in the pavement where the leach field is located. It passes underneath the handicap sign painted on the pavement and continues straight out (in the picture) toward the far parking lot corner.

This leach field services the bathrooms the children are walking towards in this picture. Consider recovering your drain field with a PIRANA, instead of replacing it. You will be pleased with the results.

A Higher Standard

IAPMO IGC 180-2003

Aerobic Bacteria Generator

for Insert into Septic Tanks, Grease Interceptors and Grease Traps

The IAPMO Standard has several advantages compared to the NSF-40 Standard. These include:

- Drain Field Recovery is required (within 120 days of startup)
- Applications suitable to more than just Residential Wastewater
- Ability to easily "Retrofit" into existing tanks

Other aspects of Pirana Technology

- Effective in 100% RV Dump Waste as high as 3000 BOD (Millersylvania State Park).
- Able to reduce the solids in Septage by an additional 80% or more.
- Works well with other technologies (Paradise Point State Park).
- Digests difficult Restaurant Grease in the grease trap.
- De-Nitrification in both "septic" tank and Drain Field (Patented process).
- Our Fully Scalable Pirana Technology can retrofit existing Sewage Treatment Plants of any size.
- Brings dissolved oxygen up above 5 PPM allowing gold fish inside septic tank (Bill Russell residence).

We are still discovering new applications for this exciting technology. Stay tuned – there is more to come.

Yours truly,

Ken Morse
NET Septic
Authorized Pirana Distributor
360-923-1080
www.netseptic.com
netseptic8@qwest.net